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Working Paper 131

THE ESTABLISHMENT OF EMPLOYER BASED CAR SHARING SCHEMES IN WEST YORKSHIRE

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May, 1980.

ABSTRACT

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This paper describes the initial findings of an SSRC sponsored project to establish and monitor organised car sharing schemes in West Yorkshire. It follows from an earlier project funded by the TRRL, which aimed to predict the likely outcome of such schemes using micro-simulation methods. The removal of most of the legal obstacles to car sharing in November 1978 made it possible to establish and monitor the effectiveness of actual schemes and to check upon the validity of the earlier models.

With the help of West Yorkshire County Council, three major employers were approached and agreed to co-operate. Following initial surveys aimed at describing existing commuting patterns, all employees were circulated with application forms affording them the opportunity to give lifts to, receive lifts from, or to pool cars with fellow-commuters. Compatible applicants were matched by manual means and informed of prospective partners. At all three sites, discounts on automotive products were offered as an inducement to carsharers and at one, free reserved car parking spaces were also made available.

Applications to join the schemes were received from less than 7% of the workforces and less than 2% of the workforces actually became carsharers as a result of the scheme.

About two thirds of the arrangements involved simple lift giving, with the same person driving at all times and receiving payments from passengers to cover costs. The remainder were carpools in which people took turns to drive. There appears to be evidence that this form of arrangement is adopted primarily to release the car for use at home rather than to save costs.

The net effect of the schemes is an insignificant (<0.5%) reduction in work journey car mileage and a somewhat larger, though still marginal abstraction of public transport patronage.

These findings broadly correspond to those of the earlier microsimulation models. Though detailed deviations occur, the experiments bear out the model's predictions that the effects of this type of carsharing scheme are likely to be extremely modest and the community benefits are unlikely to justify the costs of administration unless the impacts can be magnified or localised.

The experience gained in running these experiments may prove useful to others contemplating the establishment of schemes elsewhere.

CONTENTS

1. INTRODUCTION

1.1 Background

Car sharing and car pooling attracted considerable interest among transport planners following the 1973 oil crisis. The interest was based on a belief that car sharing could make a significant contribution towards energy savings and towards reductions in congestion, pollution and parking requirements. Interest was particularly marked in the USA and it is that country which led the way with attitudinal investigations, market research and finally with the implementation of car sharing schemes.[1,2]

British work in this field was hampered by the fact that prior to the 1978 Transport Act, car sharing with payment and, technically, carpooling, were illegal and were not covered by most private motor insurance policies. A certain amount of work, however, was carried out in order to discover the amount of car sharing already in existence[3] and to estimate the potential for increasing this.[4]

Work was done at Leeds, under contract to TRRL, using sophisticated microsimulation models[5] to predict the performance of organised car sharing schemes in various locations. This work suggested that the impacts of organised schemes were likely to be slight and that the most significant impact would be an abstraction of passengers from public transport.[6] It was realised that these findings might prove controversial, and so it was decided to test the model predictions by establishing and monitoring some experimental schemes as soon as it was legally possible so to do.

This venture was actively supported by West Yorkshire County Council, whose transportation study (WYTCONSULT) had recommended that some trial schemes be established.[7] The County Council helped select possible sites and provided manpower for the 'before' surveys.

1.2 Experimental design: general principles

Given that the intention was to test the feasibility and impact of organised car sharing and not to implement policy, it was determined that any schemes set up should be preceded by a 'before' survey to ascertain current work travel patterns and, once established, should be adequately monitored.

In order to maximise the value of the experiments, it was determined that, between them, they should cover a variety of locations and use a variety of administrative procedures. The first three experiments were all employer-based (two residence-based experiments are to follow) but were selected to represent different site and employee characteristics. There were also differences in the manner in which invitations to employees to participate were distributed and returned, and in the incentives which were offered.

2. CONDUCT OF THE EXPERIMENTS

2.1 The choice of sites

In April 1978, the County Council provided a list of 33 possible sites: all of them firms or offices with 100 or more employees, which appeared to have parking problems and which had appeared favourable to the possible establishment of a car-sharing scheme. A document was sent to each of the 33, outlining the potential benefits of car-sharing to employer, staff and community and, at the same time, making it plain that some administrative effort would inevitably be required on the part of the firm; this effort, however, would be kept to a minimum as they would not be involved in the actual operation of the scheme. The success of car-sharing schemes in the USA was pointed out, along with the kudos which might be expected to accrue to pioneer participating organisations were such success to be repeated in this country.

Subsequent negotiations between June and August 1978 led to three locations being chosen: Leeds City Council's city centre offices; an engineering firm near the centre of Wakefield, and the British Library (Lending Division) on the Thorpe Arch Trading Estate near Wetherby. An earlier attempt to establish a multi-employer scheme on the Thorpe Arch Trading Estate had been abandoned in view of a lack of interest among employers and the administrative problems of attempting to co-ordinate such a scheme.

2.2 The 'before' survey

The same questionnaire was used for the before survey interviews at all three locations. It covered mode of travel, journey length and duration, mobility, work hours and household characteristics of each

interviewee. A copy of the form used by the interviewers is included as Appendix A. Respondents were asked whether their household would be prepared to complete diaries recording all their travel, and these were subsequently posted to their home addresses around December and early January 1978-1979. The questionnaires and diaries together provided valuable data on travel behaviour, both for work and for non-work journeys, prior to the introduction of organised car-sharing.

The interviews were carried out by West Yorkshire County Council's survey staff. Interviews at Wakefield were carried out in the week beginning 6th November 1978, those at the British Library in the week beginning 11th December and those at Leeds in the fortnight beginning 29th November. In carrying out these interviews, the interviewers were instructed to make no mention of the proposed car sharing schemes - this was done to reduce response bias. The response rates at the three sites varied. The Wakefield firm was conducting in-house interviews of all its staff and permitted us to carry out our own interview immediately after; but for this, the 70% response would have been lower than it was. The rate for the British Library was 60% and for LCC, 50%; the differences here reflect the different facilities made available to the survey team.

The total number of households returning diaries was 530 (73 from Wakefield, 123 from the British Library and 334 from Leeds City Council). The low response rates mean that, notwithstanding the instructions to our interviewers, the possibility of bias among the responses cannot be ruled out.

2.3 Site characteristics

There now follows a description of each of the experimental sites. These descriptions are based on information obtained by site inspection, management interview and, in particular, from the results of the before survey as recorded in table 1.

The engineering firm in Wakefield employes around 550 manual and 340 office workers; around 90% of the workforce are male. Flexitime has been in operation for the office staff since 1977; about 100 employees work shifts. Bus services to the plant are adequate but access by car

Table 1. CHARACTERISTICS OF THE TARGET POPULATIONS*

Characteristics	W'field	BLL	Leeds**
Number of employees eligible for our scheme	890	750	2350
Number responding to the before survey	526	476	1062
Sex: % male	91.67	43.46	59.77
Occupational status:			
% manual/shop floor workers	72.62	18.39	0.60
% technical/clerical workers	24.08	61.10	77.80
% professional/managerial workers	3.30	20.51	21.80
Age:			
% under 30 years old (or 'young')	29.65	55.06	41.44
% 30 to 50 years old (or 'medium')	46.32	35.86	47.96
% over 50 years old (or 'old')	24.03	9.07	10.60
Mode use (morning trips):			
% solo car drivers	35.45	19.16	24.90
% accompanied car drivers (i.e. drivers with passengers and share driving)	13.68	23.58	15.90
% car passengers	13.29	37.68	18.40
% public transport users	17.15	14.95	38.60
Car availability:			
% with no car available in household	34.20	24.20	19.20
% with 1 car available in household	55.10	48.50	63.10
% with 2 or more cars available in household	10.60	27.30	17.70
Telephone availability: % with household phone	60.89	75.00	84.33
Driving licence: % with a car driving licence	74.70	82.90	87.10
Household size:			
% from 1-person household	4.47	9.11	8.45
% from 2-person household	32.88	38.77	36.18
% from 3-person household	26.46	23.09	21.08
% from 4+-person household	36.19	29.02	34.28
Requirement of car at work: %	7.51	3.59	35.04
Mean trip length (km)	6.64	15.20	10.88

* N.B. The statistics in this table actually refer to the people who responded to our before survey and as such may represent a biased sample of our target population.

** N.B. The Leeds figures relate only to that subset of the council staff at whom we wished to aim our scheme.

is hampered by congestion. There are four car parks available giving 350 spaces, while another 100 cars park on surrounding streets, exacerbating congestion further.

The survey showed that employees live, on average, 6½ km from the workplace. Around half of them travel to work by car but sharing is not widespread; the proportion travelling alone by car - 35½% is greater than at the other two locations. In contrast, this firm also shows the highest proportion of employees with no car - 34% and the proportion who possess a driving licence - 75% is also the lowest. 17% of the workforce commute by bus. The age distribution of the employees shows a greater proportion of over 50s than at the other two locations and the proportion under 30 is correspondingly less. There is also a tendency towards larger households.

The Lending Division of the British Library employes around 750 staff, mostly clerical, professional and managerial. Access to the trading estate in which it stands is poor, in view of the 'green field' site with no large town nearby and the limited nature of the bus service. (The National Bus Company had earlier introduced an improved service for a three month trial period, but it had failed to attract sufficient patronage and was withdrawn). Transport problems had been one of the reasons for the introduction of flexitime in 1978. Organised car sharing already existed among Library staff in the form of an information system provided by the Welfare Department for the benefit of new members of staff. This system however, was very low-key and we found that many employees were unaware of its existence. The Library's car park has ample capacity.

The survey showed that the average journey length for employees was 15 km, greater than at the other two locations. The proportion driving to work is, however, less than at Wakefield, though there is a greater tendency to carry passengers. 23½% of commuters do so and a further 38% travel as passengers. Only 15% use public transport. 24% of the workforce have no car but 83% do have a driving licence. Much of the workforce is young, with 55% under 30 and a greater proportion coming from small households than at the other locations.

Leeds City Council (L.C.C.) stands out very sharply from the other two locations in two respects: size of workforce and site characteristics. Of a total workforce of over 5,000, around 2,350 work in central Leeds in five separate office premises. It was with these 2,350 that the car-sharing experiment was concerned, and to whom the following descriptions apply.

Leeds is well served by public transport and the City Council have car parking spaces in the central area, plus metered spaces and a multi-storey car park for public use in the vicinity. The average trip length for employees is 11 km. The modal split of the Leeds workers is quite different from the other sites; 39% travel by public transport, 25% drive alone and a further 16% bring passengers. Car ownership however, is higher than at the other locations; only 19% have no car and 87% possess a driving licence. Leeds resembles the British Library in having a relatively young non-manual workforce (41% are aged under 30 and less than 1% are manual) coming from small households. A further notable feature at Leeds is the relatively high proportion (35%) of employees who said they needed their car at work.

2.4 The car-sharing schemes: publicity, incentives and application forms

2.4.1 It was decided to adopt a distinctive 'house style' for the publicity. A logo depicting a well-filled car and the legend 'ITS YORKSHARE' in red, formed a letterhead on forms and circulars, while the same motif was incorporated into posters and car window stickers (see Appendix B). The posters were distributed to the British Lending Library and Wakefield a week before, and to LCC concurrently with the application forms.

2.4.2 Arrangements were made, at no cost to the project, with two motor accessories suppliers to provide discount cards for car sharers. In addition, it was agreed with Leeds City Council that a 24-space section of a new car park close to their offices in central Leeds would be placed at the project's disposal, in order that reserved parking space could be offered for cars involved in LCC car sharing arrangements. It is important to note that the provision of these special incentives was aimed at testing the effectiveness of incentives which could

reasonably be expected to be included in non-experimental car sharing schemes. It was not intended to devise complex or costly incentives unlikely to be practical propositions elsewhere.

2.4.3 The application forms were very similar at all three sites (except, of course, in respect of the fact that they mentioned only those special incentives which were applicable to the site in question). The forms used in the Leeds scheme are included as Appendix C. Note that potential applicants were asked to indicate whether they were interested in entering into a car sharing arrangement, either by giving lifts, receiving lifts or by pooling*. Applicants were also asked to indicate the times at which they wished to arrive at and leave work, with 'earliest' and 'latest' times in each case. Two other questions related to car sharing arrangements asked whether or not the applicant was a smoker and whether or not he or she wished to travel with smokers. Apart from eliciting contact addresses, the form had only one further question - this asked for the applicant's present mode of travel to work and was required only for the monitoring programme. The questions fitted easily onto the reverse side of an A4 sheet, the front of which gave details of the scheme, including a description of the savings and gains in convenience which participants might expect to realise and the inducements available.

A second sheet gave an explanation of the position as regards motor insurance and also included two voluntary questions relating to the monitoring arrangements, via the first question existing car sharers could register their arrangements in order to qualify for the special incentives available. The second question invited respondents to put themselves forward for a detailed interview - the reward for which was the chance of winning a prize draw (funds for which were provided by the Public Relations Department of Shell (UK) Ltd). It is not thought that the existence of these voluntary questions will have affected the response to the application form itself.

2.4.4 Although the YORKSHARE application form was more or less standard for the three employers, the means of presenting it to the employees varied. In each case, the aim was to reach every employee. At Wakefield the forms were handed out unaddressed on 11th January with employees' wage packets. At the British Library, the application forms, again unaddressed, were passed on to section heads who distributed the

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* This latter term has throughout been used in a more restricted sense than has been general in the USA and refers to an arrangement where a group of drivers take it in turn to give lifts.

forms in mid-January 1979. In both cases, applicants were asked to return their completed forms to the respective Personnel Departments. In the Leeds City Council scheme, which was delayed for various reasons until 13th November 1979, a more highly organised distribution and collection system was experimented with. The forms themselves were individually addressed using printed adhesive labels derived from personnel files and produced by the Council's Computer Unit. The forms were delivered to each department, whose administrative officers had already been advised of their coming and who were responsible for distribution within their own departments. Forms were returned via pre-addressed envelopes enclosed with the application forms.

2.5 The matching procedures

The procedures followed for matching the applicants were similar in all three schemes. Manual matching was used throughout because, given that computerised matching is never justified in schemes with a target population of less than 5,000, it would have been unrealistic (as well as inefficient) to use computerised matching in these experimental schemes. The location of each applicant's home was indicated on a 1:50,000 Ordnance Survey map using a pin numbered in one of three sequences: red for prospective drivers, yellow for prospective passengers, and blue either for prospective poolers or for those who had ticked more than one option (most of whom had ticked all three). When it appeared that virtually all applications to a scheme had been received (i.e. the flow of forms had slowed to a trickle), matching began. Matching proceeded according to compatibility on four criteria:

a) Compatibility of application type: thus drivers were matched with passengers, passengers with drivers and poolers with poolers.

b) Compatibility of location: applicants matched with each other should live close together. Passengers should ideally live nearer to central Leeds than drivers and close to the route which the driver might be expected to follow.

c) Compatibility of time: applicants matched with each other should preferably be wishing to arrive at and leave work at similar times. Certainly the ranges of arrival and departure times given by each applicant should overlap. (Though for the purposes of the experiment this criterion was relaxed in certain cases - see Section 3.2.3.)

d) Compatibility of smoking habits: applicants' wishes, where expressed, were respected.

Each applicant was taken in turn; his or her potential partners were identified from the map and listed. Compatibility of times and smoking habits was then checked, while a further check was made to ensure that poolers and applicants prepared both to drive or ride (both denoted by the same colour of pin) had not been inappropriately matched. A 'matching form' (see Appendix D) for each applicant was then filled out, giving the names, home addresses and departments of prospective partners. This was posted to the applicant's home address. The onus of actually contacting the partners lay with the applicant himself; to claim the proffered incentives, he was instructed to 'register' his new arrangement on a separate section of the form. This was to be done when the arrangement had been running for a week, and the signatures of all the participants were required to prove *bona fides*. This registration, which also elicited such details as the number of days per week on which the arrangement operated and who drove, was to be returned to the employer's Personnel Department. Pre-addressed envelopes were again provided for this purpose.

As noted above, the onus for contacting possible partners and establishing car-sharing arrangements lay with the applicants themselves. In the case of the L.C.C. scheme, however, a systematic procedure of telephone interviews was undertaken with applicants. These served the triple function of obtaining additional information about new arrangements, or of learning the reasons for arrangements not being established, and (in the earliest stages) of encouraging applicants to begin making contact with their partners. In the British Library and Wakefield schemes, no such additional encouragement was given.

3. RESULTS

3.1 Components of the monitoring programme

The 'before' survey (and diaries), administered in advance of the schemes, indicated the existing travelling arrangements made by employees at the various locations. To permit an individual-level (as well as an aggregate-level) appraisal of changes in mode due to the YORKSHARE schemes, a question on the application forms asked how the applicant currently travelled to work. If the applicant subsequently entered into an arrangement, his change of mode could thus be traced.

In the Leeds scheme only, the telephone calls already alluded to gave information on new arrangements and reasons why other arrangements failed to materialise. In January and February 1980, applicants in all three schemes were contacted either by telephone or (in Leeds) by means of a special questionnaire to discover how many had indeed entered into arrangements. This information helped supplement that already received by means of the telephone interview and registration forms.

To gain an impression of changes in travel behaviour by employees as a whole, an 'after' survey is being carried out at Leeds City Council.

3.2 Findings

3.2.1 To clarify the different populations and subsets thereof which are referred to, the following terms have been used:

Target population: the entire workforce to whom application forms were sent.

Sampled population: those covered in the 'before' survey (roughly half of the target population).

Applicants: those who returned application forms, indicating a wish to establish a new car-sharing arrangement or to expand an existing one.

Participants: those applicants who subsequently took part in new or expanded arrangements.

People returning application forms but not wishing to set up or expand arrangements, and members of new or expanded arrangements who did not complete application forms, have not been included in either of the latter two populations.

3.2.2 Table 2 shows the numbers of applicants and of those ultimately entering into arrangements, at each location. Figures refer to the situation as at the beginning of March, 1980. A number of features emerge.

First, the proportion of applicants is highest at Leeds and lowest at Wakefield. The following explanations are suggested:

a) The Wakefield workforce is predominantly shop-floor, and may thus be expected to be less responsive to a scheme involving organisation and form-filling. All seven Wakefield applicants were in fact office workers. It appears that a substantial number of shop-floor workers there had thrown the application forms away unread.

Table 2. PERFORMANCE OF THE SCHEMES - SUMMARY

Indicator	Scheme		
	W'field *	BLL	Leeds
Target population (Forms distributed)	890 (340)	750	2352
Applicants:			
total	7	34	159
as % of target	0.79 (2.06)	4.53	6.76
% of applicants:			
to drive	43	15	29
to ride	0	53	33
to pool or multiple application	57	32	38
Matching:			
number matched	3	24	152
as % of applicants	43	71	95
Participants:			
number	3	7	46
as % of applicants	42.86	20.59	28.93
as % of matched	100	29.2	30.3
as % of target	0.34 (0.88)	0.93	1.96

* The parenthesised numbers relate to this firm's office staff only (all applicants came from among the office staff). The unparenthesised figures relate to the total workforce.

b) The average journey to work at Wakefield is shorter than at the other two locations, this, together with the low car ownership levels, may have led to a lower interest in the scheme.

c) The individually addressed forms at Leeds had more initial impact and commanded more attention than did the unaddressed forms at Wakefield or the British Library. The issuing of reminder slips at Wakefield did nothing to remedy this lack of initial interest.

d) The method for returning completed forms at Wakefield and the Library was probably unreasonable - particularly at Wakefield where the shop-floor workers could not be expected to be familiar with internal mail systems. The use of pre-addressed envelopes at Leeds, however, proved comparatively effective.

e) The Leeds scheme had the special incentive of free reserved parking spaces for carsharers. (Note that the proportion applying to drive is higher at Leeds than at the British Library where parking spaces are not at a premium).

A second feature to emerge from Table 2 is the varying proportions of applicants to drive, to ride or to pool at the different sites. Would-be riders predominate at the British Library, perhaps because the poor bus service leaves an unsatisfied reservoir of potential passengers. At Leeds, however, pooling is the most popular option. It may be that the parking space incentive is particularly attractive, for some reason, to would-be poolers. (The Wakefield figures are too small for valid inferences to be drawn.)

It is clear from Table 2 that it was possible to match a much higher proportion of applicants at Leeds than at the Library, and that the matching ratio at Wakefield was the lowest. Clearly, this is related to the number of applicants at each location.

One can also note from Table 2 that, with the exception of Wakefield where the numbers are too small for any inference to be drawn, the number of participants as a proportion of the number matched is almost identical - perhaps reflecting the consistency of the matching procedure.

Finally, from Table 2, the proportion of the target population which eventually became participants in carsharing arrangements varies from 0.34% at Wakefield to 1.96% in Leeds. This difference reflects the different application and matching rates at the three sites.

3.2.3 The telephone interview, undertaken at Leeds only, probably had little effect on the participation rate. It was generally found that the respondent had already either begun an arrangement, rejected the suggested partners as unsatisfactory, or contacted the partners but failed to set up an arrangement.

Some respondents asked for names of additional partners (sometimes explaining that the route which they followed did not take them near the people with whom they had initially been matched) but in none of these cases, as far as one can tell, did any actual arrangement ensue. Formation of arrangements, when it occurred, appeared to follow quite quickly after receipt of matching lists, say within two or three days.

Respondents who had not contacted anyone, and those who had made contact but had not formed any arrangement, generally gave explanations. The most frequently given reasons were that the suggested partners lived too far away from the respondent or from the route which he followed into Leeds; also that the times of travel were incompatible. Partners had been matched according to the times when they wished to travel or, failing that, the earliest and latest possible times that they could arrive at or leave work. No indication of this, however, was given on the matching forms and some respondents appear to have been convinced that their own work hours were so unusual that no one else could possibly travel with them. (In future schemes it may be advisable to provide applicants with some reassurance in this respect.) Travel times appear to be particularly important to prospective carsharers and it is perhaps significant that in the three instances where the time compatibility requirements were relaxed during matching, no arrangements materialised.

Other reasons for non-formation of arrangements varied. In several cases, either the respondent or his contacts had lost interest; one or two did not wish to sacrifice their bus season tickets, while three found that their contacts wished to car pool whereas they themselves did not.

It was interesting to note that in only two cases were respondents unhappy about the proposed levels of remuneration. (One thought that they were too low, the other that they were too high.) One driver confirmed that the existence of the recommendations facilitated raising the question of payment when an arrangement was being formed.

Table 3. SOME DETAILS OF THE SCHEME'S PERFORMANCE

Indicator	Scheme		
	W'field	BLL	Leeds
Arrangements formed:			
total number	1	3	21
number of liftgiving arrangements (one driver)	0	3	14
number of pooling arrangements (alternating drivers)	1	0	7
mean number of applicants per arrangement	3.0*	2.3*	2.2
mean number of members per arrangement **	3.0*	4.0*	2.6
% of arrangements which are expansions of pre-existing arrangements	100.0*	67.0*	24.0
Distances to work: (kms)			
sample of target population	6.6	15.2	10.9
airline distances: all applicants	10.2*	12.3*	12.3
airline distances: applicants to drive	6.8*	14.5*	12.8
airline distances: applicants to ride	-	11.2*	9.8
airline distances: applicants to pool (or multi-application)	12.3*	11.9*	13.2
airline distances: all participants	5.5*	14.2*	9.7
airline distances: participants in liftgiving arrangements	-	14.2*	7.4
airline distances: participants in pooling arrangements	5.5*	-	13.8
Percentage male:			
sample of target population	92	43	60
all applicants	14	53	68
applicants to drive	100*	40*	80
applicants to ride	-	44*	34
applicants to pool (or multi-application)	75*	82*	83
all participants	67*	67*	57

* NB The small sample sizes make statistical inference hazardous.

** This figure includes members of pre-existing arrangements which acquired new members through YORKSHARE

3.2.4 Table 3 gives details of the number and membership of the car-sharing arrangements formed. The small numbers involved, particularly in the Wakefield and Library schemes, make it hazardous either to compare the localities or to infer any wider trends, but several features may be noted. First, lift-giving arrangements are commoner than pooling arrangements. Second, the number of participants per arrangement rarely exceeds two: clearly, the effect of making contacts and of co-ordinating travel times and routes when there is more than one partner is generally thought to outweigh the financial benefits of having more people among whom to share costs. Third, the Library and Wakefield arrangements are nearly all expansions of existing arrangements; at Leeds, on the other hand, sixteen out of the twenty-one arrangements are completely new.

In respect of distances to work, applicants to ride live closer to their workplace than do applicants to drive or to pool. Participants' work journeys are generally shorter than those of applicants (reflecting the difficulty of finding potential partners living close to one another in the more far-flung localities).

Participants in pooling arrangements generally travel further than participants in simple lift-giving arrangements.

Not surprisingly, the majority of applicants to drive or to pool are male, whilst the majority of applicants to ride are female.

Table 4 shows the applicants' previous modes of travel to work. Four of the 7 Wakefield applicants were solo drivers; only one previously used public transport. At the British Library, in contrast, the most common previous mode was car passenger and the second most common was accompanied car driver. It would appear that, at the Library, around 70% of people interested in car sharing are already car sharing in some respect - their interest in YORKSHARE is as a means of changing or acquiring additional partners. At Leeds, relatively few applicants were bringing passengers; most were either solo drivers or public transport users. Applicants here seem to be concerned to establish new arrangements rather than to extend old ones.

The modal split of applicants will, naturally, be influenced by the pre-existing modal split of workers at each location. The two right-hand columns of Table 4 therefore give the number of applicants travelling by each mode as a percentage of the number in the target population travelling by that mode (these latter figures were estimated

Table 4. APPLICANTS' MODE OF TRAVEL TO WORK

	Modal split (%)			Applicants as a % of the target population by mode*	
	W'field	BLL	Leeds	BLL	Leeds
Solo car or motor cycle	57.1	11.8	38.0	2.4	10.5
Car driver with passenger/carpool	28.6	32.4	22.3	6.9	9.4
Car passenger	-	39.7	2.8	2.8	1.0
Public transport	14.3	16.2	36.8	9.4	6.6
All modes	100	100	100	4.5	6.8

* Modal splits for the target population have been estimated from the samples. The Wakefield firm has been omitted from this section of the table owing to the small number of applicants.

from the sample data). Comparison of these figures with the harmonic mean percentages at the bottom of each column reveals which modal groups are over- or under-represented among the applicants. At the Library, public transport users and accompanied car drivers seem particularly likely to apply, whereas solo car drivers seem unlikely to apply. This finding reinforces the suggestion that at the Library the YORKSHARE scheme's appeal has mainly been to people already carsharing in some way or to those with no car at their disposal. At Leeds, in contrast, applications have been particularly forthcoming from car drivers, whether already carrying passengers or driving alone. The reserved parking space may have provided an additional incentive to Leeds drivers.

Two other, more general, inferences which one may also hazard are that drivers already bringing passengers are more amenable to the idea of car-sharing than those driving alone, and that car passengers, perhaps not surprisingly, are the least interested in applying.

3.2.5 Although the number of actual arrangements formed was small, the 21 established at Leeds form a sufficient number to allow their characteristics to be examined and compared. Table 5 attempts to do this. The information used for this purpose came from various sources: from telephone interviews, from registration of arrangements to claim the incentives, and from the follow-up surveys, either by questionnaire or telephone.

Table 5 shows the number of arrangements whose members worked in separate departments of the Leeds City Council. Whereas 46% of pre-existing arrangements drew all their members from a single department, almost all the new arrangements brought together members working in separate departments - often in separate buildings. This feature is reinforced in the subsequent section of the Table which gives the proportion of arrangements whose members had not known each other previously. The YORKSHARE scheme appears to have been successful in drawing together interested people who might not otherwise have met; whether such schemes are likely to be permanent in view of the separation of their members is another question.

Table 5 also shows the financial arrangements operating - namely, whether car-sharers make regular payments to cover costs. It appears that payments were made in about 44% of those lift-giving arrangements existing prior to the YORKSHARE scheme, but were made in about 86% of

Table 5. A COMPARISON OF YORKSHARE AND PRE-EXISTING CAR SHARING ARRANGEMENTS AT LEEDS CITY COUNCIL

Indicator	Pre-existing arrangements	YORKSHARE arrangements (incl. pre-existing ones which have acquired new members via YORKSHARE
Distribution of members:		
proportion of arrangements having all the members from the same department	46%	19%
proportion of arrangements having over ½ the members from the same department*	65%	34%
proportion of arrangements having less than ½ the members from the same department	34%	67%
Proportion of participants not previously known to one another	-	80%
Financial arrangements:		
proportion of liftgiving arrangements involving payment	44%	86%
proportion of pooling arrangements involving payment	20%	50%

* Includes arrangements having all members from the same department.

those arrangements brought about by YORKSHARE. This difference doubtless reflects the greater informality of the pre-existing arrangements. Perhaps somewhat surprisingly, members of about half the pooling arrangements deemed payments as necessary.

People who registered car sharing arrangements were asked whether passengers were picked up at their doors or whether they had to walk to a pick-up point either in the street or at the driver's home. Among those arrangements which resulted from YORKSHARE, it was found that 4 passengers were picked up at home, 7 had to walk to a pick up point in the street and 3 had to walk to the driver's home. This willingness of the passengers to walk some distance may reflect the fact that many of them had previously been accustomed to walking to a bus stop - or that drivers are in a stronger bargaining position!

The methods of alternating the use of cars in carpool arrangements varied and some were quite elaborate. In one, the arrangement for the following day was settled on the previous day's journey home, as at least one member would generally need his car during his work; in another, the member who had to drive further drove on two days a week and the other on three; in another, one member drove on Mondays and Fridays and the other on Tuesdays and Thursdays, while on Wednesdays both travelled by bus. The obvious-sounding expedient of alternating cars weekly came to light in only one instance, possibly because the need for the car at work, or by the spouse at home, made this type of arrangement unattractive.

3.2.6 The arrangements at BLL and Wakefield can be simply described. That at Wakefield is an existing carpool which now conveys an extra passenger who had known both the drivers, though not very closely, beforehand. She pays the person who is driving and is picked up at the end of the street where she lives. At the time of writing, the arrangement has been in operation for over a year in its present form. Of the three BLL arrangements, on the other hand, two have recently ended owing to the driver moving to a new job, and the third operates on an occasional basis only. None were pools - payments were made to the driver. Two of them were additions to existing lift-giving arrangements.

Table 6. FORMER MODES OF TRAVEL TO WORK OF PARTICIPANTS (ALL THREE SCHEMES COMBINED)

Former mode	Role of member in the arrangement			
	Driver	Passenger	Pooler	Any
Solo car driver	11(64.7)	2(6.3)	5(25.0)	18(26)
Car driver with passenger	6(35.3)	0	0	6(9)
Car passenger	0	10*31.2	0	11(16)
Carpool	0	0	8*(40.0)	10(14)
Bus	0	15(46.9)	1(5.0)	16(23)
Train	0	3*(9.4)	1(5.0)	4(6)
Motor cycle	0	1(3.1)	0	1(1)
Mixed mode (car and public transport)	0	1(3.1)	5(25.0)	6(9)
Total	17(100)	32(100)	20(100)	69(100)

Parenthesised figures in each column are percentages.

* These figures include carsharers who joined the arrangements independently of the YORKSHARE scheme.

3.2.7 Although the former modes of travel of applicants to YORKSHARE have already been considered, those of actual participants have not so far been examined. These are shown in Table 6, which incorporates all participants, whether they joined their arrangements via YORKSHARE or had been members prior to the addition of new members via YORKSHARE. A number of points emerge.

a) All drivers in lift-giving arrangements had driven previously; none had changed mode except in the sense that they had acquired passengers.

b) The majority of passengers in lift-giving arrangements had formerly travelled by bus.

c) All but two of the poolers had previously driven to work on at least some occasions. Moreover, 65% were already accustomed to alternating between driving and riding, either through existing carpools or through 'mixed mode' travel, partly driving and partly using public transport.

It may be postulated that pooling is perhaps an adaptation to circumstances in which the car is not always available (possibly because other members of the household need it), rather than a conscious attempt to save running costs.

3.3 Scheme evaluation

The crucial question to be asked of a car-sharing scheme - to what extent does it save car journeys or draw passengers away from public transport - is not easy to answer; the necessary calculations are complicated by the fact that several of the arrangements do not operate every day, or in both outward and homeward directions. Moreover, some of the participants formerly travelled by different modes on different days. Taking these variations into account as best one can, it appears that, in terms of the journey to work, the YORKSHARE scheme at Leeds has effected an average weekly saving in car distance travelled of 374 kms; reduced the number of daily bus journeys by 23 (680 passenger kms per week); and reduced the number of daily train journeys by 12 (approximately 788 passenger kms per week). The saving in car distance travelled would have been greater had it not been for the diversions necessary to collect passengers, and the fact that some carpoolers, who formerly used public transport at least part of the time, now travel by car exclusively, hence creating additional car mileage. In Leeds the scheme has eliminated the use of between three and five cars, and there is an estimated saving of around eight gallons of petrol a week.

The Wakefield scheme eliminated 50 km of passenger travel by bus (five return journeys) per week, while the British Library scheme saved the use of one car and abstracted one bus passenger: a saving of 130 km of car travel and 200 passenger kms by bus weekly. These figures exclude one arrangement which operates only occasionally, drawing a further passenger away from the bus for his 40 km daily return trip.

The direct effects of the YORKSHARE schemes are clearly very modest. The indirect effects (e.g. the creation of an interest in car sharing which may result in increased car sharing, though not via YORKSHARE, and the off-peak effects), are not expected to change the scale of these impacts but their precise nature must await analysis of the 'after' survey data.

Given the limited take-up of the schemes as described, can they be justified in terms of their administrative costs? Clearly, this will depend upon the extent of promotion and the incentives which are offered, and who actually runs the scheme. In the case of the Leeds scheme, the various costs came to around £830, a third of which was spent on the computer printout of employees' names. As to benefits, the community saves an average 8 gallons of petrol a week - say up to £4 (exclusive of tax). If the costs are regarded as once-for-all expenditure, it would take four years for the Leeds scheme to break even in cost-benefit terms. This further assumes either that all the arrangements established through YORKSHARE continue over that period or that the initial thrust gives rise to a new and continuing interest in car-sharing which would not have arisen otherwise. Evidence for either tendency is still awaited. One should, of course, consider such intangible community benefits as reduced congestion and pollution and even a reduction in the need for extra buses at peak hours, but the experience of the present schemes suggests that these will be negligible. The individuals in the various arrangements presumably realise personal benefits of their own - companionship, petrol savings, less need to wait for buses and the release of their cars - but whether one is justified in spending £830 upon them will largely depend upon where the money is coming from.

4. COMPARISON WITH THE MICROSIMULATION MODEL'S PREDICTIONS

4.1 Background

As was mentioned in the introduction to this report, one of the purposes of the experiments was to check the predictions of the microsimulation model of organised car-sharing schemes which was produced under contract to T.R.R.L.[6] The rigour of the test is considerably enhanced in that the microsimulation was calibrated using a different population from that exposed to the Leeds scheme and as some of the microsimulation's results were controversial, such a check is particularly valuable.

4.2 The comparison

4.2.1 The results of the Wakefield or British Library schemes have not been compared with the microsimulation's predictions because none of the model's predictions related to sites with similar characteristics. However, such a comparison was possible with the Leeds scheme and is presented in Table 7.

The first two columns of the Table contain model predictions relating to hypothetical car sharing schemes, designed for workers in Leeds who live within the commuting hinterland of that city.* Scheme A covers about 5,000 people who work in a small part of the Leeds central business district while Scheme B covers all 21,000 commuters to Leeds and incorporates the effect of free reserved parking space for car-sharers. To make the comparison between model predictions and actual outcome more valid, those Leeds City Council employees living outside the study area used in the microsimulation study have been excluded. (In fact, only ten Leeds applicants lived outside this area and none of them entered into YORKSHARE arrangements.)

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* For a precise definition of the study area and the eligible population see the appropriate reference 6.

Table 7. COMPARISON OF MODEL PREDICTIONS WITH THE OUTCOME OF THE LEEDS CITY COUNCIL SCHEME

	Microsimulation model Hypothetical schemes		YORKSHARE Leeds scheme (subset)
	A City centre workers	B With parking incentive	
Target population:			
Number	4,985	21,235	2,300
Mean distance to work (km)	6.0	6.0	10
% solo drivers	24.0	24.0	23
% travelling by public transport	48.0	48.0	40
% drivers without free parking space	-	50.0	65
% male	51.0	53.0	60
% professional/managerial	33.0	32.0	20
% technical/clerical	35.0	34.0	79
% shop floor/manual	32.0	34.0	1
% under 30	31.0	32.0	41
% from car-owning households	60.0	61.0	75
Applicants:			
Number	387	2,176	149
As % of target	7.8	10.2	6.5
Mean distance to work (km)	9.0	9.4	10.0
% previously solo drivers	39.0	28.0	37.0
% previously travelling by public transport	35.0	45.0	37.0
Applications* (%)			
To drive	31.0	28.0	38.0
To ride	38.0	41.0	40.0
To pool	31.0	30.0	22.0
% of applicants matched	79.0	91.0	99.0
Participants:			
Number	42	453	46
As % of target	0.8	2.1	2.0
As % of applicants	10.9	21.0	30.8
Mean number per arrangement	2.2	2.3	2.2
Effect on peak-hour travelling:			
% reduction in private vehicle km per week	0.05	0.1	0.37
% reduction in car park demand	0.12	0.03	0.43
% reduction in public transport patronage (passenger km per week)	1.0	2.8	2.46

* People applying under two or more categories are regarded as having made two (or more) applications.

4.2.2 In making the comparison one must first note the differences between the target populations:

- The Leeds scheme is much smaller than either of the modelled schemes.
- The Leeds employees are younger, have somewhat longer journeys to work, have a higher proportion of males and of technical/clerical grades, but a much lower proportion of shop floor/manual workers. The Leeds employees also have higher household car availability.
- The modal split for work journeys varies; the Leeds target population's use of public transport is lower than in either modelled scheme.
- The proportion of Leeds drivers who have preferential parking space is less than that assumed in the corresponding model scheme B.

These differences between the target populations clearly mean that the comparison between the modelled and real schemes is not perfect.

4.2.3 If the prime indicators of a scheme's performance are taken to be the proportion of the target population who participate in it and the number of arrangements formed then the fit between the model predictions and the Leeds scheme is quite remarkable; the parking incentive prediction (scheme B) suggested that 2.1% of the target population would become participants and that the mean number of participants per arrangement would be 2.3. The corresponding figures for the Leeds scheme are 2.0% and 2.2!

4.2.4 A closer examination,[8] however, suggests that this fit, though good, is perhaps less remarkable than it appears at first sight. The Leeds scheme attracted fewer applications from the target population than did either of the modelled schemes. This shortfall, which cannot be satisfactorily explained in terms of the known differences between the target population, was compensated for by a higher rate of matching and a greater tendency for arrangements to be set up, once matched.

The Leeds scheme attracted relatively more potential drivers than did the modelled schemes, particularly scheme B. The results of the latter - which predicted a high rate of applications to ride and a correspondingly higher abstraction from public transport - had already been acknowledged as paradoxical in a model which was supposed to be demonstrating the effect of a parking incentive.[6] The higher application rate from Leeds drivers is quite intuitive and the mismatch may arise from two factors: first, the hypothetical nature of the survey question upon which the modelled effect of parking space was calibrated; and second, the model's assumption that only 50% of drivers were without a pre-existing reserved parking space. In the Leeds scheme the figure was 65%, increasing the number of drivers likely to be attracted by such an offer.

The matching systems used in the modelled and actual schemes were not directly comparable. The models used a computerised method, whereas YORKSHARE's manual approach could become highly personalised: some applicants supplied details of their routes and matches could be arranged accordingly. Many of the matches resulting from this manual process could never have been produced by any reasonable computerised system, and some duly materialised into actual arrangements - a testament, if ever one were needed, to the value of individualised, as against impersonal, computer matching systems, which in any case cannot easily take route networks and physical barriers into account.

The effect of the Leeds scheme upon elements of the work journey transport system is clearly similar in scale to that predicted by the model. The main discrepancy is in the reduction in demand for car parking spaces, but the numbers involved are so small that percentage changes are bound to fluctuate widely. Especially gratifying is the close correspondence in reduction of public transport use, while the models appear to have slightly under-estimated the savings in private vehicle mileage.

4.3 Conclusions on the comparison

It is clear that the model predictions have, in broad terms, been borne out in practice. The fit between predicted and actual is very good, but the remarkable correlation in the case of the proportion of the target population who become car sharers is, to some extent, a coincidence, being the result of compensating errors.

5 SUMMARY AND CONCLUSIONS

5.1 Review of findings

In the three schemes that have, so far, been established, one may note the following results:

a) Between 4½ and 7% of employees applied to join the car sharing schemes.

b) Less than 2% actually joined schemes as a result of YORKSHARE.

c) Many of the new sharers have joined pre-existing arrangements.

d) The British Library site, with its isolated location and poor public transport might seem to be an ideal site for car sharing. In fact it is so ideal that car sharing was already well established and the YORKSHARE scheme had little impact.

e) The Wakefield firm, with its high proportion of shop-floor workers, is not conducive to an organised car sharing scheme and indeed, no response at all came from that section of the workforce. Unfamiliarity with form filling and the use of an internal mail system may have contributed to this. The predominantly short work journeys may also have made carsharing not appear to be worthwhile.

f) The comparative success of the Leeds scheme is probably due to a combination of the following factors:

- the use of individually addressed application forms;
- the provision of a clear 'channel' for their return;
- the provision of the car parking incentive;
- the large number of employees and their location within separate departments (increasing the changes of finding a good potential match among people not known to the respondent). The fact that, although in separate departments, the target population were all employees of the same organisation will have helped foster a feeling of affinity to, and confidence in, potential partners.

g) The reduction in use of private cars has been minimal and the abstraction of patronage from public transport, though more marked than reduction in car use, is not very significant.

h) Most of the passengers in new car sharing arrangements are required to walk, either to the driver's home or to some pick up point in the street.

i) The majority of new car sharing arrangements, and even some car pooling arrangements, involve financial compensation.

j) Many of the arrangements operate on less than five days a week and, in the case of pools, the pattern of alternating the driving is often quite complex.

k) There is evidence that car pooling is frequently an expedient to circumvent car availability constraints rather than an attempt to cut costs.

l) Manual matching appears to have been greatly superior to computer methods. At least two arrangements would never have been matched had the usual computerised matching routines been followed.

m) Telephone encouragements were probably only of limited value in inducing applicants to contact each other.

n) Recommended levels of remuneration were found useful, and very few applicants appeared to disagree with them.

o) Reserved car parking space appeared to be quite effective as an incentive to car share.

p) Once applicants received their matching lists, the major constraints against forming arrangements appeared to be considerations of distance and (particularly) travel times. It may be helpful, when matching applicants, to tell them what time their potential partners are able to travel.

q) It would be almost impossible to overstress the need for enthusiasm and imagination on the employer's part, coupled with the interest and co-operation of the staff and unions involved.

5.2 Conclusions

The predictions of the microsimulation models have been borne out in practice - viz organised car sharing schemes do not attract sufficient interest from the populations involved to have a significant impact on modal splits, congestion or vehicle miles travelled. The main impact is, in fact, a slight reduction in public transport usage. A major reason for the modest impact of organised car sharing schemes is that most potential car sharers are already carsharing!

Unless the impacts of schemes can be magnified or localised so as to allow savings in the provision of conventional public transport, the benefits of car sharing schemes will be confined to the participants.

The experience of organising the YORKSHARE schemes has made it possible to point to a number of site characteristics, work force characteristics and organisational procedures which can significantly affect the performance of car sharing schemes.

Several aspects of organised car sharing remain to be studied: the effect of changes in peak mode upon off-peak travel*, (for instance through making the car available for other members of the household); the durability of the arrangements which were set up through YORKSHARE*; the feasibility and effectiveness of a scheme aimed at a residential area rather than at an individual workplace*. Other areas of research include possible means of improving the present poor performance of do-it-yourself schemes (for instance, of the 'pigeon-hole' variety); the provision of more novel forms of incentive (for instance, the right to use bus-only lanes)**; the establishment of schemes specially designed to replace poorly used bus services and (perhaps allied with this), the development of vanpooling.

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* Now being studied at the Institute for Transport Studies

** Under investigation by G.L.C.

ACKNOWLEDGEMENTS

The authors are pleased to record their debt to all those who helped in the establishment of the experiments reported in this paper. From West Yorkshire County Council - Mr. Naylor (Director of Transportation), Mr. West, Mr. Wyborn, Mr. Swann and Mr. Walkden; from the Wakefield firm - Mr. Massam (Personnel Manager); from the Thorpe Arch Trading Estate - Mr. Martin (Estate Manager, Hepper & Watson Ltd.), Dr. Barr (Personnel Manager, British Library Lending Division): from Leeds City Council - Mr. Finney (Director of Planning), Mr. Shilson, Mrs. Senior, Mr. Preston, Mr. Burton, Mr. Redmond, Mr. Parry, Mr. Kingham and Mr. Monaghan.

We also wish to thank all of those who assisted in the collection and analysis of the data. This help was much appreciated. Special thanks in this context to the survey team from West Yorkshire County Council, and to colleagues Mike Wheatley, Francis Montgomery, Christine Gill and Ros Thompson.

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Appendix A: Interview Form for Before Survey.

number ☐☐☐☐

1 During the past two months what has been your usual method of travel TO work?

drive car alone (1)	drive car with passengers (2)	share driving (3)	car passenger (4)	bus (5)	train (6)	walk/ bicycle (7)	other (8)	
								☐

1a — how many passengers? ☐
1b — how many passengers from your household? ☐
1c — how many passengers from your workplace? ☐

2 During that same period of time what has been your usual method of travel FROM work?

drive car alone (1)	drive car with passengers (2)	share driving (3)	car passenger (4)	bus (5)	train (6)	walk/ bicycle (7)	other (8)	
								☐

2a — how many passengers? ☐
2b — how many from your household? ☐
2c — how many from your workplace? ☐

3 During these last two months on how many days have you travelled to *or* from work by some *other* means? (for any reason) ..... days ☐☐
(once a week = 8 days)

4 How long have you been { driving alone / riding as a passenger / travelling by public transport / walking/cycling / etc. } to work.
.....yrs. ☐☐
.....mnths. ☐☐

5 (Apart from picking up/dropping passengers) How often do you *not* travel directly home from work? (eg. shopping, pub)

everyday (1)	twice a week (2)	once a week (3)	once a fortnight/rarely (4)	
				☐

6 Do you work variable shifts? yes (1) If yes go to Q. 18 no (2) ☐

7 —What time do you normally arrive at work? ☐☐☐☐

8 —What time do you normally leave work? ☐☐☐☐

9 —How often do you start or finish at least 10 minutes earlier or later than average?

twice a week (1)	once a week (2)	once a fortnight (3)	rarely (4)	
				☐

10 —On average, how long does it take you to get *to* work? (mins) ☐☐☐

11 —How often does this time vary by more than 5 mins?

daily (1)	twice a week (2)	once a week (3)	once a fortnight/rarely (4)	
				☐

12 —On average how long does it take you to get *from* work? (mins) ☐☐☐

13 —How often does this time vary by more than 5 mins?

daily (1)	twice a week (2)	once a week (3)	once a fortnight/rarely (4)	
				☐

14 —Are you entitled to work flexitime? If no go to question 17

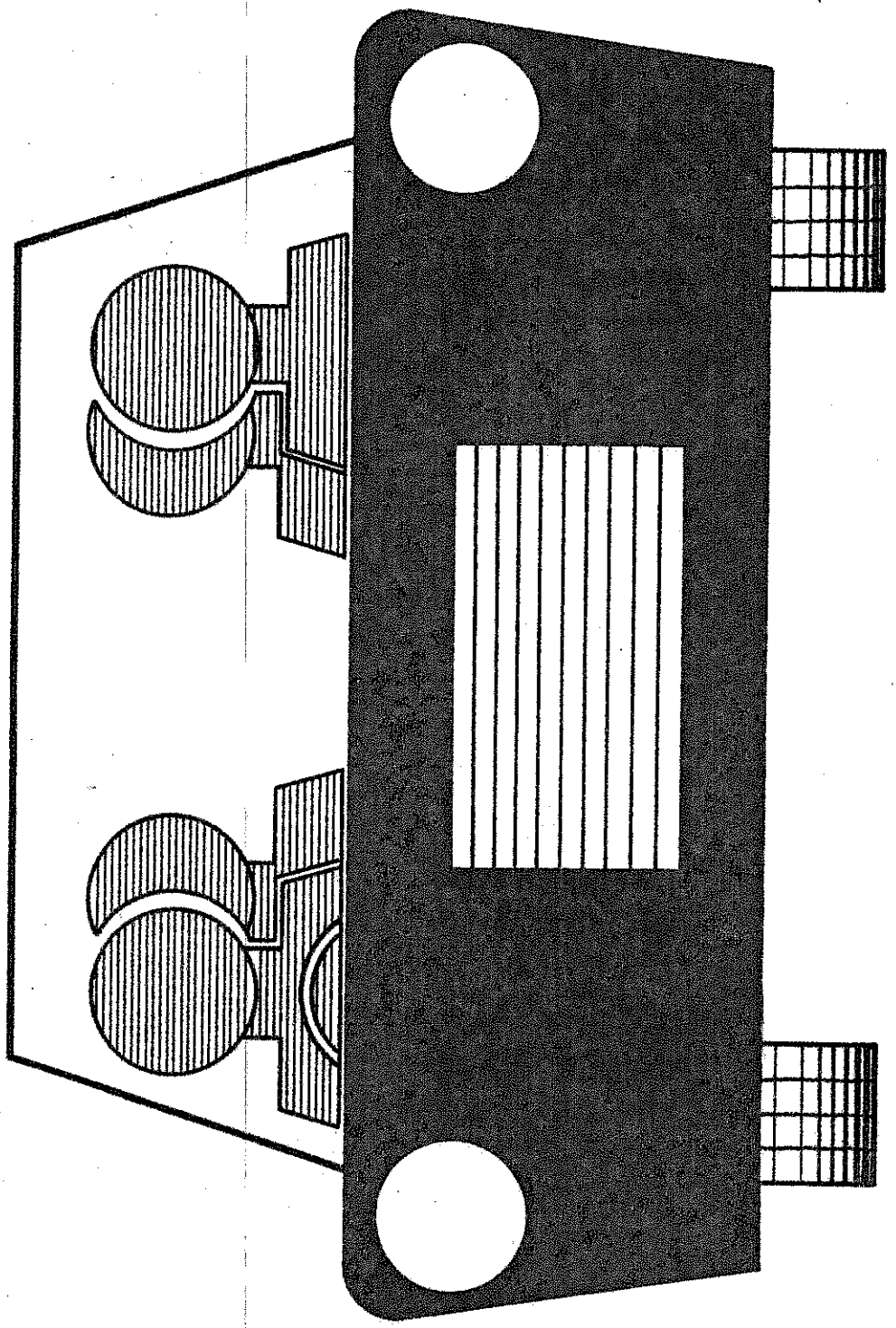
yes (1)	no (2)	
		☐

15a Given your home circumstances, what is the *earliest* time you could set off for work? ☐☐☐☐

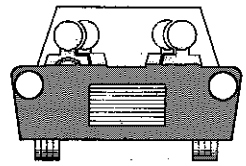
15b Given your home circumstances, what is the *latest* time you could set off for work? ☐☐☐☐

16a Given your home circumstances, what is the *earliest* time you could arrive home from work? ☐☐☐☐

Appendix B: The 'YORKSHARE' Logo.



Appendix C: YORKSHARE application form.



ITS YORKSHARE

As you may know your employer is participating in the 'ITS YORKSHARE' share-a-ride scheme.* The idea of the scheme is to find out how many employees are interested in giving or receiving lifts to work. Those who are interested would be given the names of others who live near them in order that they might come to some mutually profitable arrangement for sharing their journeys to and/or from work.

The following reasons may persuade you to take part in the scheme:

For Potential Drivers

1. Cost Savings - If you currently drive to work you are probably spending over £250 a year on car running costs for the journey to work. The law and most insurance companies now allow you to get a contribution towards this cost from your passengers (advice will be given as to the amount that you could reasonably charge).

2. Special Incentives are being arranged for car sharers - see attached notice.

For Potential Passengers

1. Personal Convenience and cost savings - If you feel that your present method of transport is unable to provide you with a cheap, fast and comfortable journey to work, it may be better for you to travel as a car passenger.

2. Family Convenience - If you currently drive to work perhaps someone else in your household would be able to use the family car if you did not have to use it week-in and week-out.

3. Special incentives are being arranged for car sharers - see attached notice.

Applications to join the scheme will be sorted and lists sent out to those taking part showing the names, addresses etc. of those of their fellow employees who live near them and with whom they might profitably share their journey to work. Note that, apart from these lists of names addresses etc. no personal information will be circulated and none whatever will be passed on to anyone outside the scheme.

If you are interested in taking part in the scheme please fill in the form overleaf and return it to the personnel department as soon as possible.

Act now - You have nothing to lose!

* Organised by the Institute for Transport Studies (ITS), Leeds University, with help from the West Yorkshire County Council.

INSURANCE - SPECIAL NOTICE

Almost all insurance companies have, since autumn 1978, allowed drivers to accept contributions towards running costs from their passengers.

Although this new policy is already in operation, many drivers have not yet been notified of this fact by their insurers. The insurance companies will be notifying their clients during 1979 - as and when policies come up for renewal.

Drivers who have not yet received this notification should contact their insurers direct before accepting any payment from passengers.

SPECIAL INCENTIVES

A. For members of all LCC car sharing arrangements registered* with ITS YORKSHARE:

free parking spaces are being reserved in the new Portland Place car park (spaces limited so hurry!)

substantial discounts (up to 40%) have been arranged with the following local traders: National Tyre Service.

B. For all LCC employees:

Shell (UK) Limited have kindly donated £200 which is to be offered in a series of prize draws. Winners will be chosen at random from among those (ridesharers or not) who help ITS YORKSHARE by answering a series of questions about their household travel patterns.**

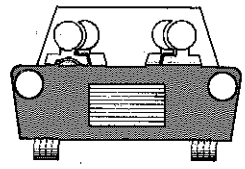
* To register an existing car sharing arrangements with ITS YORKSHARE the driver (or nominated driver) should complete Section A on the back of his copy of this form.

New car sharing arrangements, which are formed as a result of ITS YORKSHARE's matching service, can be registered as soon as they are formed.

N.B. Allocation of parking spaces will not begin until new car sharers have had an opportunity to register.

** If you wish to have your name put forward for this prize draw please complete Section B on the back of this form.

Appendix D: The Matching Form.



ITS YORKSHARE

Dear

Thank you for your application to join the ITS YORKSHARE scheme. Section A overleaf is a list of those of your fellow employees who live near you and who would like to share their journey to work with you. Please contact them as soon as possible to discuss arrangements for sharing.

The law and virtually all insurance companies* have, since October 1978, allowed drivers to receive a contribution towards car running costs from their passengers provided that the combined contributions do not result in a profit. To be sure of this you should not exceed the following rates per mile:

for a car with one passenger the passenger should pay 3p per mile;

for a car with two passengers the passenger should pay 2p per mile each;

for a car with three passengers the passengers should pay $1\frac{1}{2}$p per mile each.

(Rates based on current running costs for an average car).

We recommend that drivers and passengers agree a rate between themselves right from the outset.

Yours sincerely,

Peter Bonsall

P.S. In order that you can qualify for the special incentives and privileges mentioned in the previous letter your carsharing arrangement must be registered with ITS YORKSHARE. When it has been operating for one week the driver (or a nominated driver if there are more than one) should complete Section B on the back of his copy of this form and return it to the Personnel Department. Section A should be retained by you in case you want to find another driver or passenger at a later date.

... ...

* Insurance companies will be informing their clients of this change during 1979. Individual notification will occur as and when policies come up for renewal. If you have not yet received notification from your insurers you should contact them direct before accepting any payment from passengers.